

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) An arrangement for determining the spectral reflectivity of a measurement object as a function of angle of incidence comprising:
 - a radiation source for irradiating the measurement object; and
 - a spectrograph for spectral radiation detection;said radiation source having two different beam areas proceeding therefrom serving as measurement beam and reference beam which are directed simultaneously to different spectrally dispersing areas of at least one dispersive element and to different receiver areas of at least one receiver in the spectrograph.
2. (Original) The arrangement according to claim 1, wherein the different beam areas proceeding from a common emission region are selected in such a way that the measurement beam and the reference beam with a normal on the surface of the measurement object enclose identical angles with opposite signs, so that the measurement beam and the reference beam travel in parallel beam paths after the measurement beam is reflected at the surface of the measurement object.
3. (Original) The arrangement according to claim 1, wherein the radiation source has known emission characteristics in the different beam areas.

4. (Original) The arrangement according to claim 1, wherein the radiation source has isotropic emission characteristics at least in the different beam areas.
5. (Original) The arrangement according to claim 3, wherein the extension of the radiation source is limited such that the measurement beam and the reference beam do not intersect when the beam paths extend adjacent and parallel.
6. (Original) The arrangement according to claim 5, wherein an x-ray tube whose uncollimated radiation is used for the measurement beam and reference beam serves as radiation source.
7. (Original) The arrangement according to claim 6, wherein the x-ray tube contains a rotating target disk as anode, whose plane of rotation extends parallel to the surface of the measurement object.
8. (Original) The arrangement according to claim 7, wherein the target disk is constructed so as to be tapered at its front face for reducing the emission region.
9. (Original) The arrangement according to claim 1, wherein the different spectrally dispersing areas and the different receiver areas are provided as two areas located adjacent to one another on a dispersive element and on a receiver.
10. (Original) The arrangement according to claim 1, wherein the different spectrally dispersing areas and the different receiver areas are provided as two separate adjacent dispersive elements and two separate adjacent receivers